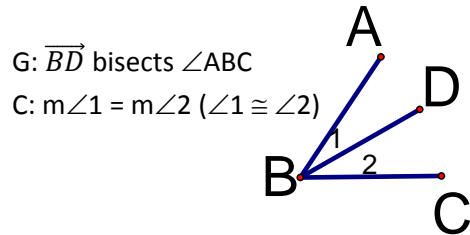
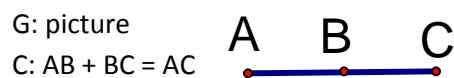


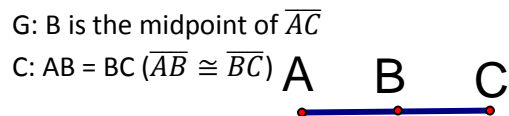
R: A. A. P.



R: def. of  $\angle$  bisector



R: S. A. P.



R: Def. of midpoint

G:  $\angle 1$  and  $\angle 2$  are supplementary

$\angle 3$  and  $\angle 2$  are supplementary

C:  $\angle 1 \cong \angle 3$

R: Supplements of  $\cong \angle$ s are  $\cong$

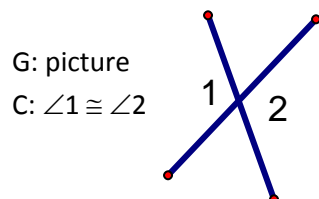
G:  $\angle 4$  and  $\angle 5$  are complementary

$\angle 6$  and  $\angle 7$  are complementary

$\angle 4 \cong \angle 6$

C:  $\angle 5 \cong \angle 7$

R: Complements of  $\cong \angle$ s are  $\cong$



R: Vertical angles are  $\cong$

G:  $\angle 4$  and  $\angle 5$  are supplementary

C:  $m\angle 4 + m\angle 5 = 180$

R: Def. of supplementary

G:  $m\angle 4 + m\angle 5 = 180$

C:  $\angle 4$  and  $\angle 5$  are supplementary

R: Def. of supplementary

G:  $\angle 4$  and  $\angle 5$  are complementary

C:  $m\angle 4 + m\angle 5 = 90$

R: Def. of complementary

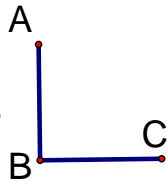
G:  $m\angle 4 + m\angle 5 = 90$

C:  $\angle 4$  and  $\angle 5$  are complementary

R: Def. of complementary

G:  $\overline{AB} \perp \overline{BC}$

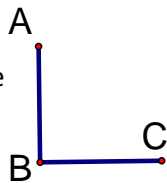
C:  $\angle ABC$  is a right angle



R: def. of perpendicular lines

G:  $\angle ABC$  is a right angle

C:  $\overline{AB} \perp \overline{BC}$



R: def. of perpendicular lines

G:  $\angle ABC$  is a right angle

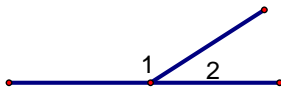
C:  $m\angle ABC = 90$

R: Def. of right angle

G:  $m\angle ABC = 90$

C:  $\angle ABC$  is a right angle

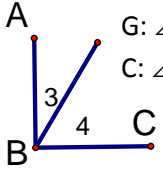
R: def. of right angle



G: picture

C:  $\angle 1$  and  $\angle 2$  are supplementary

R: The supplement Theorem



G:  $\angle ABC$  is a right angle

C:  $\angle 3$  and  $\angle 4$  are complementary

R: The complement theorem

G:  $\angle 1 \cong \angle 2$

C:  $m\angle 1 = m\angle 2$

R: def. of congruence

G:  $m\angle 1 = m\angle 2$

C:  $\angle 1 \cong \angle 2$

R: def. of congruence

G:  $AB = BC$ ;  $EF = GH$

C:  $AB + EF = BC + GH$

R: addition

G:  $AB + BC = EF + GH$ ;  $BC = EF$

C:  $AB = GH$

R: subtraction

G:  $AB = BC$

C:  $BC = AB$

R: symmetric

G:  $m\angle 1 + m\angle 1 = 180$

C:  $2m\angle 1 = 180$

R: substitution

G:  $m\angle 1 = m\angle 2$ ;  $m\angle 2 = m\angle 3$

C:  $m\angle 1 = m\angle 3$

R: transitive